Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

Columbia Gulf Transmission Company

Delhi Compressor Station Delhi, Richland **Parish, Louisiana Agency Interest Number:** 2780 **Activity Number:** PER20070001 **Proposed Permit Number:** 2460-00004-V4

I. APPLICANT

Company:

Columbia Gulf Transmission Co - Delhi Compressor Station PO Box 546 Delhi, Louisiana 71232-0546

Facility:

Columbia Gulf Transmission Co - Delhi Compressor Station 7179 Hwy 17 Delhi, Richland Parish, Louisiana

UTM Coordinates: 642.0 kilometers East and 3,587.0 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

Delhi Compressor Station is an existing natural gas transmission facility. The station receives natural gas via pipeline from an upstream compressor station, compresses it using natural-gas fired reciprocating engines and turbines. The facility then transmits the product by pipeline to a downstream station. Auxiliary equipment at the station includes natural gasfired emergency power generators and storage tanks for lubricating oils, glycol, and other liquids.

Columbia Gulf Transmission Co - Delhi Compressor Station is a designated Part 70 source. Several Part 70 permits have been issued to the facility. These include:

Permit No.	Unit or Source	Date Issued
2460-00004-V0	Entire Facility	March 11, 1997
2460-00004-V1	Entire Facility	June 8, 1998
2460-00004-V2	Entire Facility	January 12, 2003
2460-00004-V3	Entire Facility	April 10, 2006

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit renewal/modification application and Emission Inventory Questionnaire were submitted by Columbia Gulf Transmission Company on June 14, 2007 requesting a renewal/modification to their existing Part 70 operating permit. Additional information was received on September 3, 2008.

Project

With this renewal/modification application, Columbia Gulf is adding a Carbon Monoxide Emissions cap of 125 tons per year total for the two new natural-gas fired turbines (Emission Point IDs: E11 and E12). For consistency, they are also capping the NO_x emissions at 108.2 tons per year and VOC emissions at 3.7 tons per year for these turbines and updating the SO_2 emissions.

There are no facilities under common ownership and contiguous with Delhi Compressor Station.

Proposed Permit

Permit 2460-00004-V4 will be the renewal/modification of Part 70 operating permit 2460-00004-V3 for the Delhi Compressor Station.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	<u>Before</u>	<u>After</u>	<u>Change</u>
PM_{10}	27.5	27.5	-
SO_2	1.3	1.3	-
NO_X	1069.7	1069.7	-
СО	418.9	425.95	+7.05
VOC *	87.4	87.4	-

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Explanation for Exemption Status or Non-Applicability of a Source				
ID No:	Requirement	Notes		
Facility Wide	Comprehensive TAP Emission Control Program [LAC 33:III.5109]	EXEMPT. Emissions are from the combustion of virgin fossil fuels		
	Compliance Assurance Monitoring [40 CFR 64]	DOES NOT APPLY. Facility does not use a control device to achieve compliance		
E01-E07: Compressor Engines	Emission Standards for Sulfur Dioxide Continuous Emissions Monitoring [LAC 33:III.1503]	EXEMPT. Units emit less than 250 tons of SO ₂ per year. Record and retain at the site for at least 2 years the data required		
E11-E12: Compressor Turbines	Emission Standards for Sulfur Dioxide Recordkeeping and Reporting [LAC 33:III.1513]	to demonstrate compliance with or exemption from SO ₂ standards of Chapter 15. Compliance data shall be reported annually in accordance		
G24, G28: Generators P29: Firewater		with LAC 33:III.918. Turbines are exempt because subject to more stringent NSPS Subpart KKKK.		
Pump		Suopuit Minn.		
E01-E07: Compressor Engines	NESHAP 40 CFR 63 Subpart ZZZZ (Reciprocating Internal Combustion Engines)	EXEMPT. Engines are existing 2-stroke Lean Burn units (40 CFR 63.6590(b)(3)).		

Explanation for Exemption Status or Non-Applicability of a Source				
ID No:	Requirement	Notes		
E01-E07: Compressor Engines G24, G28: Generators P29: Firewater Pump	40 CFR Part 60 Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Engines	DOES NOT APPLY. Existing prior to June 12, 2006.		

Prevention of Significant Deterioration/Nonattainment Review

Not required. This project is below the 250 tpy threshold for Prevention of Significant Deterioration (PSD).

Streamlined Equipment Leak Monitoring Program

Not required.

MACT Requirements

This facility is a minor source of toxic air pollutants (TAPs) per LAC 33:III.5103.B.3; emissions from the combustion of virgin fossil fuels are exempt from LAC 33:III.Chapter 51, Subchapter A.

The facility is a major source of hazardous air pollutants (HAPs) under Section 112 of the Clean Air Act and the Environmental Protection Agency's regulations for formaldehyde. As such, the turbines would be subject to NESHAP Subpart YYYY on March 5, 2004. However, on August 18, 2004, EPA amended Subpart YYYY, requiring on an initial notification per 40 CFR 63.6145. The facility is exempt from NESHAP Subpart ZZZZ because the engines are existing 2-stroke Lean Burn units (40 CFR 63.6590(b)(3)).

Air Quality Analysis

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

Not applicable.

VI. PERIODIC MONITORING

Not required.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H_2S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated

under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_X) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4) , Ethane (C_2H_6) , Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

 PM_{10} – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H_2SO_4) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.